

WHAT IS CLAIMED IS:

1 1. A communication device, comprising:
2 an acquiring unit operable to acquire a communication
3 distance indicating how far the communication device is from
4 another communication device in data communication;
5 a distance judging unit operable to judge whether the
6 acquired communication distance is less than or equal to a
7 predetermined value; and
8 a communication unit operable, when judged in the
9 affirmative, to conduct content transmission/reception with
10 the other communication device.

1 2. The communication device of claim 1, wherein
2 the communication unit conducts data communication
3 with the other communication device prior to conducting the
4 content transmission/reception, and
5 the communication distance indicates how many relay
6 devices data transmitted by the other communication device
7 passed through before reaching the communication device.

1 3. The communication device of claim 2, wherein
2 the communication distance indicates how many routers,
3 as the relay devices, the data passed through from the other
4 communication device to the communication device.

1 4. The communication device of claim 3, wherein
2 the communication unit conducts the data communication
3 in a packet format that includes a time-to-live whose value
4 decreases by "1" for every router passed through, and
5 the acquiring unit uses the time-to-live in acquiring
6 the communication distance.

1 5. The communication device of claim 4, further comprising:
2 a key sharing unit operable to share key information
3 with the other communication device.

1 6. The communication device of claim 5, further comprising:
2 an encryption unit operable, using the shared key
3 information, to encrypt contents and decrypt encrypted
4 contents, wherein
5 the communication unit transmits/receives encrypted
6 contents.

1 7. The communication device of claim 6, wherein
2 each packet received from the other communication
3 device includes first identification information that
4 uniquely identifies a router to which the other communication
5 device is connected, and
6 the communication device further comprises:

7 a router-information acquiring unit operable to
8 acquire second identification information that uniquely
9 identifies a router to which the communication device is
10 connected;

11 an ID judging unit operable to judge whether the first
12 identification information matches the second
13 identification information; and

14 a suppressing unit operable, if judged in the negative,
15 to suppress the content transmission/reception by the
16 communication unit.

1 8. The communication device of claim 7, wherein

2 a data size of each packet transmitted/received by the
3 communication unit is equal to a maximum transmission unit
4 of a network to which the communication unit is connected,
5 and

6 transmission/reception of partial packets is
7 prohibited.

1 9. The communication device of claim 8, wherein

2 the time-to-live included in each packet received from
3 the other communication device is set to a predetermined
4 value at the time of transmission, and

5 the acquiring unit reads a value of the time-to-live

6 from the received packet, and acquires the communication
7 distance based on the difference between the read value and
8 the predetermined value of the time-to-live.

1 10. The communication device of claim 9, wherein
2 the predetermined value of the time-to-live is "1".

1 11. The communication device of claim 10, wherein
2 at least part of each packet received/transmitted by
3 the communication unit is encrypted, and
4 the encryption unit outputs each received packet to the
5 acquiring unit after decrypting the encrypted part of the
6 packet, and outputs each packet for transmission to the
7 communication unit after encrypting at least part of the
8 packet.

1 12. The communication device of claim 1, wherein
2 the communication distance indicates a distance
3 between the communication device and the other communication
4 device.

1 13. The communication device of claim 1, wherein
2 the communication distance indicates a time period
3 required in data communication between the communication

4 device and the other communication device.

1 14. A content distribution system in which a content is
2 transmitted from a transmission device to a reception device,
3 the transmission device including:

4 an acquiring unit operable to acquire a communication
5 distance indicating how far the communication device is from
6 another communication device in data communication;

7 a distance judging unit operable to judge whether the
8 acquired communication distance is less than or equal to a
9 predetermined value; and

10 a transmission unit operable, when judged in the
11 affirmative, to transmit the content to the reception device,
12 and

13 the reception device operable to receive the content
14 transmitted by the transmission device.

1 15. A content distribution method used by a communication
2 device, comprising the steps of:

3 acquiring a communication distance indicating how far
4 the communication device is from another communication
5 device in data communication;

6 judging whether the acquired communication distance is
7 less than or equal to a predetermined value; and

8 conducting content transmission/reception with the
9 other communication device when judged in the affirmative.

1 16. A content distribution computer program used by a
2 communication device, comprising the steps of:

3 acquiring a communication distance indicating how far
4 the communication device is from another communication
5 device in data communication;

6 judging whether the acquired communication distance is
7 less than or equal to a predetermined value; and

8 conducting content transmission/reception with the
9 other communication device when judged in the affirmative.

1 17. An LSI for executing a content distribution computer
2 program used by a communication device, the program
3 comprising the steps of:

4 acquiring a communication distance indicating how far
5 the communication device is from another communication
6 device in data communication;

7 judging whether the acquired communication distance is
8 less than or equal to a predetermined value; and

9 conducting content transmission/reception with the
10 other communication device when judged in the affirmative.